SECTION 5300 - WATER SERVICE RECONNECTIONS

5301 GENERAL. The contractor shall supply all materials, labor and equipment necessary for water service reconnection as indicated on the plans. This shall include tapping of the main, boring of road crossings, compaction and resodding of the established lawns.

All other applicable sections of these specifications shall also apply to water service reconnections.

5302 APPROVED MATERIALS FOR RECONNECTION TO DUCTILE IRON PIPE.

A. Meter Setter--5/8" Ford VH-71-12C with locking stop.

B. Meter Tile--18" x 30" Sonoloc rigid PVC.

C. Copper Pipe--Soft "K" copper, 3/4" and larger.

D. Corporation Stop--Ford F-600; Mueller H-15000 with cc thread.

E. Meter Tile Cover--Sidener S-18" Meter Box Cover, Traffic Model; Clay & Bailey P-2207 Type T.

F. Service Saddles--1 1/2" - 2" Mueller (H105); Rockwell 313 or 317, and Ford 101N with stainless steel straps.

5303 APPROVED MATERIALS FOR RECONNECTION TO PVC PIPE.

A. Meter Setter--5/8" x 3/4" A.Y. McDonald 22-212WD22 33 with locking stop.

B. Meter Tile--18" x 30" A2000 or equivalent.

C. Copper Pipe--Soft "K" copper, 3/4" and larger.

D. Corporation Stop—3/4"cc x 3/4" CTS MACPAC 4701-22 A.Y. McDonald.

E. Meter Tile Cover--Sidener S-18" Meter Box Cover, Traffic Model; Clay & Bailey P 2210.

F. Service Saddles—Single Hinge A.Y. McDonald 3895, all brass with cc thread.

5304 METER INSTALLATION. All meter setters shall be located at the direction of the Engineering Division.

Water meter pits shall be placed at the property/right-of-way line of the service address. Alternate locations must have prior approval by the city engineer.

All meter setters shall be set in the meter tile so that the face of the meter is at least 16 inches, but not more than 22 inches, below the finished grade.

Meter pits shall not be located in driveways, walkways or cast-in concrete without prior approval from the city engineer. Traffic model rings and lids shall be installed when required for these instances.

All meter tiles shall be set plumb, backfilled and compacted with earth.

Each meter tile shall be centered directly over the meter that it serves.

The top of the tile cover shall be flush with the finished grade.

5305 COPPER SERVICE LINES. Copper service lines shall be composed of no more than two (2) separate lengths between the corporation stop and the meter connection.

All connections to the copper tubing shall be made with flared fittings. No field or shop soldered connection will be permitted. All soldered fittings shall be factory soldered using silver solder.

The water service line will be installed in a different ditch from the gas service line. **See Section 3014 for Separation Requirements for water and sewer services.**

All service lines from main to meter must be the same diameter or larger (3/4" minimum) than meter.

5306 STREET AND DRIVE CROSSINGS. All street and/or drive crossings shall be made by means of boring, pushing or tunneling. Unless otherwise approved by the engineer, all street borings shall be 48 inches (48”) below the finished grade.

No fitting shall be installed under pavement unless approved by the engineer.

5307 TAPPING. The contractor shall make all taps on the new water main.

The contractor shall expose the water main immediately prior to tapping.

Excavation and backfilling of the main must be done in the same eight-hour day between 8 A.M. and 5 P.M. It must be filled immediately after the tap is made and inspected.

All barricades and warning devices shall be provided and maintained by the contractor.

5308 SALVAGE MATERIALS. All usable salvaged items including fittings, valves, meters, etc., shall be field cleaned and transported by the contractor to the city's designated storage yard and shall remain the property of the owner.

5309 EXCAVATION.

A. Copper Piping.

1. Mechanical equipment used for trench excavation shall be of a type, design, and construction, and shall be so operated that the rough trench widths of approximately 12 inches (12") maximum width and vertical sidewalls can be obtained at least from an elevation one foot (1') above the top of the installed pipe to the bottom of the trench.

2. The use of mechanical equipment will not be permitted in locations where its operation would cause damage to trees, buildings, culverts or other existing property, utilities or structures above or below ground. In all such locations, hand excavating methods shall be used.

3. Cutting trench banks on slopes to reduce earth load to prevent sliding and caving will be permitted only in areas where the increased trench width will not interfere with surface features or encroach on right-of-way limits. Slopes shall not extend lower than one foot (1') above the top of the pipe.

4. Where pipe grades or elevations are not definitely fixed by the contract drawings, trenches shall be excavated to a depth sufficient to provide a minimum depth of backfill cover over the top of the pipe of 42 inches (42"). Greater pipe cover depths may be necessary on vertical curves or to provide necessary clearance beneath existing pipes, conduits, drains, drainage structures, or other obstructions encountered at normal pipe grades, but shall be limited to no more than 48 inches (48") of cover. Measurement of pipe cover depth shall be made vertically from the outside top of pipe to finished ground or pavement surface elevation.

5310 BACKFILL, COMPACTION AND SODDING. Compaction of backfill shall be done immediately after placement of backfill. Under no circumstances shall there be more than eight uncompacted meter locations at one time. Compacted backfill will be required for the full depth of the trench. All sections of this specification concerning backfill, compaction and sodding shall apply to the service line reconnections and replacements.